



K4GSO.us

The Oracle

Newsletter of the Silver Springs Radio Club

Oldest Radio Club in Marion County, FL



July 2020

President's Message

Elbert Wilkinson, KQ3K

I'M GETTING BETTER NOW:

I mentioned last month that my wife retired after a 30 year teaching career. It seems I now have full-time adult supervision - no more being left to my own devices and schedule. I retired in 2012 and have been Mr. Mom to our now 18 year old college bound son, so I figured I was due a break! I informed the Mrs. that she would have to carry her share of the load on house work, yard duties, dinner ready at a reasonable hour, washing the cars and doing the dishes. Guys, learn from me now! Trust me...That. Was. A. Big.

Mistake. The doctors tell me that with more rehab, I might regain use of my left arm. The swelling around my eyes will eventually go down I am told. The limp might well be permanent and I haven't quite gotten the hang of having to sit down to pee! I'm still amazed at what a useful weapon a skillet could be. No charges are pending...the three female cops said I had it coming. Go figure...

You know I'm kidding, right and just having some fun? You can tell this is a slow month and I am scrambling for stuff to keep Marty and Mr. Skillet away from me! Seriously, I am blessed to be married to a wonderful "extra class" home chef and beautiful woman. I definitely "married up." We are looking forward to some travel, especially the mountains and the beach in the fall. Sadly, she still won't let me date! She also shares my warped sense of humor.

MEMBERSHIP:

Don't forget, MEMBERSHIP is still job #1. We actually have another new application or two following a very successful VE session on May 11. Older members, we need you to help new members, especially those recently licensed, so adopt someone. This is important for their success in the hobby and us as a club. The sheer volume of information and technical details can be overwhelming, so help them out. End of sermon for this month. Rinse and repeat next month!

Next Club Meeting

7:00 PM
Tuesday, July 21 via ZOOM

Details to follow.

SSRC Board of Directors meets the first Tuesday of each month, 7:00 PM as required.

Upcoming Events/Meetings

[Click here to sign up.](#)

[ARES Update](#) - Ron Viola, KS4SW

All ARES meetings are canceled until further notice.

[Education/Testing](#) – Jim Burgess, KN4MIV

Testing will be July 14, 7 PM, Green Clover Hall

[MARS HF Skills Exercise](#) – July 20-24

IARU HF World Championship

This Weekend, July 11-12, 2020

<http://www.arrl.org/iaru-hf-world-championship>

Silver Springs
Radio Club Net

K4GSO

Mondays at 7:30 PM
146.610, PL 123

QSO TODAY VIRTUAL HAM EXPO:

Mark your calendar for August 8 and 9 to attend via your desktop, laptop, tablet or smartphone. There will be speakers, exhibitors and special conferences all built around a virtual reality platform. This is an ARRL sanctioned hamfest sponsored by Icom, FlexRadio, DX Engineering, RFinder, RigExpert, RTSystems, Elecraft and GigaParts. With Dayton being cancelled this Spring, this is your chance to see what you missed. If you are interested, more information and sign-up can be found here ->>> www.qsotodayhamexpo.com

FIELD DAY – JUNE 27 & 28:

After a five year hiatus, the club planned to return to Green Clover Hall for Field Day. What we did not plan for was the COVID-19 to rear its very ugly head again and spoil our event. We had a good plan and intentions, but the virus got a vote and we had to cancel the official Field Day and encouraged members to work from their home QTHs and submit their results for the club score. To add some fun and a sense of friendly competition, we asked members who wanted to participate have their results tracked on contestonlinescore.com in real time. If you took the time to watch, there was quite a duel between two of our members – Wayne, N4FP and Dave, WA3LXD.

		Points	QSO's
26	Silver Springs Radio Club	5,281	1,488
	N4FP	2,340	585
	WA3LXD	1,916	503
	N4GL	628	157
	KC5CMX	139	98
	KN4MIV	134	67
	KQ3K	124	78

It was a sight to behold! Wayne and Dave duking it out like a couple of Roman Gladiators (OK, I confess, I've been watching the Roman Empire on NetFlix), but these gentlemen were great and helped put SSRC on the contest map.

Marty, N4GL, also added even more CW QSOs to the total as did Carl and Jim. My score was not so impressive. At the start I was plagued with a sudden unexpected high SWR that shut down my IC-7100. I proceeded to try to track down the problem and put another rig online on a different antenna, but that took some time. I could bore you with my tale of woe and my efforts to isolate the problems – which were many. Fortunately, I don't believe the 7100 was harmed due to its foldback protection – but time will tell and hopefully, it won't have to be returned to the mothership or another outpost for repair.

I want to thank all the club members who also participated in Field Day from their homes. We will eventually get the final ARRL results for the club. We said at the outset that it would be different – and it was.



THIRD ANNUAL OUTDOOR EXPO:

As mentioned last month, North Central Florida Media has invited the club to participate in their event this year. Because of the recent uptick of COVID-19 cases in Marion County, the event has been pushed back to at least September. The exact date and time will be determined based upon the local virus situation. The

event will still be held at the Southeast Livestock Pavilion. It was a fun event last year where we demonstrated the art and skill of amateur radio communications to the public. This year we will try to setup inside the arena instead of outside for better foot traffic exposure to the public. NCFM owns and operates several popular local radio stations:



With all of our earlier scheduled high visibility events (Marion County Day, March for Babies and Florida Parks on the Air) cancelled due to the COVID-19 restrictions, this will give us an excellent opportunity to promote the club and hobby.

PERRY FIELD LEASE RENEWAL:

It is hard to believe that we last renewed the lease on Perry Field almost five years ago, but time flies. We were contacted by County Engineering just before the lockdown about the club exercising its option to renew for another five years. The item was discussed at the last board meeting with the board electing to proceed and notice was given to the County with proof of liability insurance provided as requested. The renewal will be placed as a consent item for one of the meetings scheduled for the fall.

THE ORACLE:

Thank you to all the members who send Marty, N4GL, articles for the club newsletter. Your contributions help make our newsletter interesting and informative. It can be on anything you been doing, working on, experimenting with, etc. – you know the drill. Please send your articles to her at ---->>>
N4GL.MARTY@GMAIL.COM

With a little luck, we will be done with all these COVID-19 virus restrictions and we can get back to normal. Stay well and safe.

Ham On and be Radio-Active! That is all.

72

Elbert Wilkinson, KQ3K
kq3k@cox.net

News You Can Use

[The newsletter](#) will be posted to the K4GSO website. Send information and pictures to [Marty](#)

[SSRC Logo Shirts & Caps](#)

[Green Clover Key Card](#)

[Perry Field Access](#)

[Membership Application](#)

[Buy/Sell/Trade](#)

[QST NFL](#) – NFL Section Newsletter

[Silver Springs Radio Club Website](#)

[NFL Section Website](#)

[WA7BNM Contest Calendar](#)

[NG3K DX](#)

Club Minutes and Financial Reports**2020 SSRC Officers**

[President - Elbert Wilkinson, KQ3K](#)

[V President – Jim Burgess, KN4MIV](#)

[Secretary – Ivory Williams, W6IVY](#)

[Treasurer – Bill Gillespie, KW5BG](#)

Directors

[Ron Viola, KS4SW](#)

[Mike Condon, W9MNC](#)

[Wayne Brown, N4FP](#)

Committee Chairs:

[Membership – Carl Berry, KC5CMX](#)

[Trustee K4GSO – Wayne Brown, N4FP](#)

[Newsletter – Marty Brown, N4GL](#)

For Your Reading Pleasure - More COVID-19 Humor

Contributed by: Elbert Wilkinson, KQ3K

- Can we uninstall 2020 and reinstall it again?... I think it has a virus ...
- Just asked a 6 year old if he understands why there is no school. He said yes because they are out of toilet paper.
- On the bright side, I am no longer calling this shelter-in-place. I am an artist-in-residence.
- After years of wanting to thoroughly clean my house but lacking the time, this week I discovered that wasn't the reason.
- You're not stuck at home, you're safe at home. One word can change your attitude and one cough can change your life.
- If you thought toilet paper was crazy ... just wait until 300 million people all want a haircut appointment.
- 2020 is a unique Leap Year. It has 29 days in February, 300 days in March and 5 years in April.
- Wearing a mask inside your home is now highly recommended. Not so much to prevent COVID-19 but to stop eating.
- This cleaning with alcohol is total b.s. NOTHING gets done after that first bottle.
- Does anyone know if we can take showers yet or should we just keep washing our hands??
- You think it's bad now? In 20 years our country will be run by people home schooled by day drinkers....
- My Mom always told me I wouldn't accomplish anything by laying in the bed all day, but look at me now! I'm saving the world!
- I miss the days when we were terrified of Romaine lettuce. Ahh, the good times....
- I swear my fridge just said: "what the hell do you want now?"
- Whoever owes you money, go to their house now. They should be home.
- Home schooling Day #3: they all graduated. #Done.



Rainbow over Berry Field!

From Carl Berry, KC5CMX

MARS Announces HF Skill Exercise

Carl Berry, KC5CMX, AEC Marion County

Here's an excellent opportunity for you and your group to work on honing emergency communication skills and practice working with another partner agency.

<http://www.arrl.org/news/mars-announces-hf-skills-exercise>

Software-defined Radio

by Bert Garcia N8NN and Pete Castella N4CQN

For more than 100 years the equipment required to decode and process radio signals has been analog circuitry. While Software-defined Radio (SDR) technology is not new, having been developed more than 30 years ago, the ability for hams to affordably experiment with SDR has only been possible for less than a decade. The first commercial single-chip RF processor became available in 2009 (1). In 2012 the first really cheap SDR based on the RTL2832U chip became available (2) and now costs less than \$25. Powerful personal computers (you're using one right now!), inexpensive hardware, and free software have made SDR available to every ham. This article describes how you can add an SDR receiver to your station.

Basic Software-defined Radio System

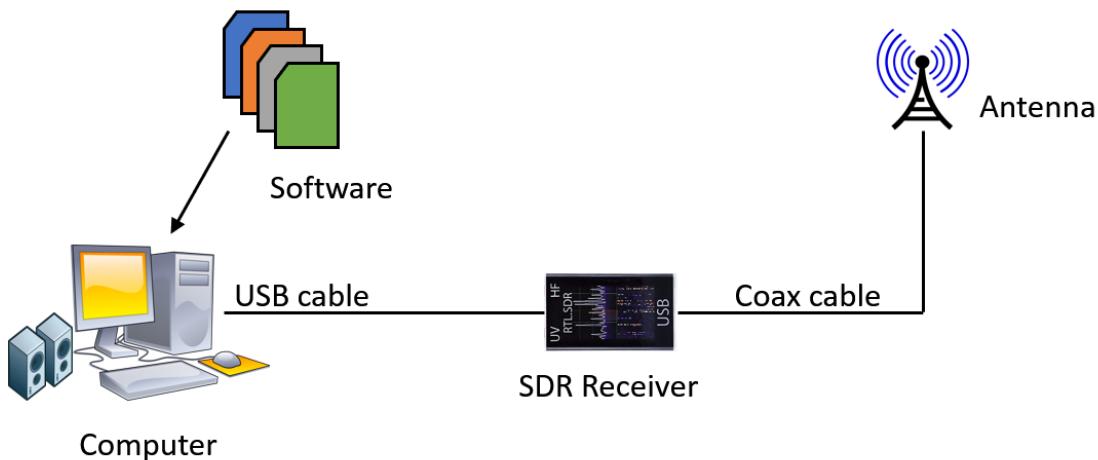


Figure 1: A basic software-defined radio system.

The basic SDR system in Figure 1 is built around an inexpensive SDR receiver connected to an outdoor antenna and using free software on your personal computer. Typically, the SDR is powered by the USB cable, and the antenna connector is a female SMA. Here is a list of affordable SDR receivers for ham use:

1. RTL-SDR RTL2832U Dongle, <https://www.amazon.com/>, \$25
2. Nooelec Lana, <https://www.amazon.com/>, \$30
3. SDRplay RSP1A, <https://www.sdrplay.com/rsp1a/>, \$120
4. Airspy HF+ Discovery, <https://v3.airspy.us/>, \$170
5. HackRF One, <https://www.adafruit.com/>, \$340

The \$25-\$30 SDRs usually only cover about 20 MHz to 2 GHz, having poor performance on many of the HF bands. An up-converter can solve this problem, but now the cost has approached that of the SDRplay and Airspy receivers which cover all the HF bands in addition to VHF/UHF. The HackRF One is sold as a laboratory instrument and includes a 20 mWatt transmitter and has slipped up and out of the affordable category.

This article, by SSRC members Bert Garcia N8NN and Pete Castella N4CQN, can be found in its entirety on the ARRL NFL website: <https://arrl-nfl.org/kb-tech-info/n8nn-n4cqn-sdr/> Or, <https://tinyurl.com/yd4foosk>.

LOCKDOWN PROJECTS #2

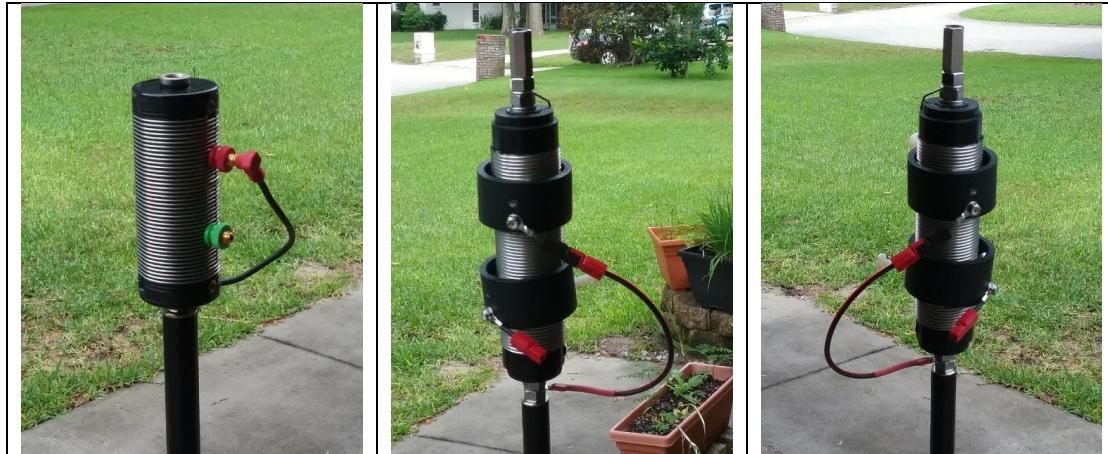
Elbert Wilkinson, KQ3K

I like to tinker in my garage shop and build things. Some are actually useful...some not so much. One project I have been toying around with is making the BuddiPole coils more user friendly and easier to adjust. Those who have the BuddiPole or BuddiStick system will know exactly what I am talking about. Buddipoles are the erector set of portable antennas, the build quality is outstanding but adjusting it to a resonant frequency can be tedious.

On the left below is the typical Buddipole coil with the taps that must be unscrewed, repositioned, clipped in and screwed back in, and tested again – until one gets a “low” SWR and resonance somewhere around 50Ω . Did I mention it can be tedious? In all fairness, the Buddipole has a steep learning curve early on but it

does get much easier with experience and repetition. But it could be a lot easier with a little tinkering and modification.

In the center is a Wolf River Coils Silver Bullet Mini. Wolf River recently came out with a dual collar that will let one set two bands on one coil – say 20m and 40m. I admit I’m frugal and knew I could roll my own, so I did. On the right is the same coil but tapped at 40m. What you see are two separate adjustable collars with Anderson Power Pole connectors. These slide up and down the coil until you get an acceptable SWR and resonance. Doesn’t that look much easier to adjust? It is! You can buy the dual collars from Wolf River for \$20 plus shipping or make them yourself for about \$7 +/- . That’s what I did. Build notes follow below.



Now, also imagine if you could convert the Buddipole to something like the Wolf River modification? Using the same concept, I took a 2' length of Schedule 40 PVC pipe that cost less than \$5 and cut it into sections about $1\frac{1}{4}$ " in width, drilled and tapped three $1/4\times20$ tpi holes. One is for the Buddipole stock tap screw which is secured to the collar using $1/4\times20$ tpi nut. The other two are used to tighten the collar with two $1/4\times20$ nylon screws from Lowes that cost \$0.63. The only construction difference is moving the stock interior metal clip to the new collar and building new leads with Power Poles.

I did say I was frugal didn’t I? They work, too, and are very easy to adjust.

You will notice all of my coils and collars are painted in flat black. I live in a HOA that is pretty lenient in enforcing the covenants, but why push the limits. I keep everything in low profile stealth mode.



Set-up on the left is for 40m with the Wolf River Coil and a Buddipole fully extended long whip at 102". The tap is on the lower collar. The green radial wire is about 32-33' elevated about 2ft. The SWR is 1.2:1 with 45Ω resistance. Close enough.



On the left is the same Wolf River Coil above but tapped on the upper collar for 20m and a Buddipole fully extended long whip at 102". The elevated radial was shortened to about 16ft. The SWR is 1.1:1 with 56Ω resistance. Again...close enough to keep the radio happy.

